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October 18, 2011

Via Fed Ex and Email
California Energy Commission
Docket No.: 11-AAER-2
Docket Unit
1516 Ninth Street, Mail Station 4
Sacramento, CA 95814-5504
Docket@energy.state.ca.us

DOCKET

11-AAER-2

DATE OCT 18 2011

RECD. OCT 18 2011

Re: Response to California's Notice of Proposed Action of
Amendments to Appliance Efficiency Regulations, Docket
Number 11-AAER-2, dated October 7, 2011

Dear California Energy Commission:

Schumacher Electric Corporation, ("Schumacher") is an Illinois Corporation and the leading manufacturer of automotive battery chargers distributed throughout the United States, including California.¹ The battery chargers we manufacture and distribute are linear and high frequency battery chargers that convert AC power to DC power to charge and/or start automotive 6volt and/or 12volt batteries. As the leader in the automotive battery charger industry, we have valuable information for the State of California, including, but not limited to, cost issues, design issues, and general retailer and consumer information relating to our market.

In reviewing California's Notice of Proposed Amendments to the Appliance Efficiency Regulations ("the NOPA"), Schumacher has identified two major concerns: (1) the lack of definitions set forth in the NOPA; and (2) the NOPA's conclusion regarding ease of compliance and the competitive implications that have been overlooked if the NOPA is to become effective as written.

¹ In 2010, Schumacher manufactured approximately 3,205,267 battery chargers totaling \$97,490,760 in sales. We estimate our market share to be in excess of 75%.

Lack of Definitions/Clarity in the NOPA

Schumacher has noted issues with missing definitions and/or lack of clarity in the NOPA regarding consumer versus non-consumer small battery charging systems.

Classification of consumer and non-consumer battery chargers:

According to the NOPA, all of Schumacher's battery chargers would be classified as "small battery charger systems" as our battery chargers all have a rated output of 2 kW or less. See, page 2 of NOPA. The NOPA states that "the small battery charger system standard shall become effective for consumer products manufactured on or after January 1, 2013, and for non-consumer products manufactured on or after January 1, 2017." See, page 3 of NOPA. However, nowhere within the NOPA does it clearly define "consumer" and "non-consumer" battery chargers.

In documentation utilized to support the NOPA, the California Energy Commission Staff Report for the 2011 Appliance Efficiency Rulemaking, Staff Analysis of Battery Chargers and Self Contained Lighting Controls, CEC-400-2001-001-SF, dated October 2011, (the "Staff Report") states, "Federal law makes a distinction between consumer and non-consumer products; the proposed state regulations and this Staff Report do not make that distinction." Stated differently, it appears the NOPA has ignored the Federal law used to support the proposed regulations by failing to distinguish between consumer and non-consumer. As the NOPA is written, Schumacher cannot determine the date in which its "small battery charger systems" would be required to meet the NOPA requirements – January 1, 2013 or January 1, 2017.

That said, even if the NOPA were to adopt the Federal regulations² in which a consumer product is defined as "a product that, to any significant extent, is distributed in commerce for personal use or consumption" and a non-consumer product is defined as a product that is "used primarily in industrial and commercial settings" Schumacher's battery chargers arguably could fall within both classifications and to date, the State of California has not offered any guidance with respect to classification of automotive battery chargers under the NOPA.

As such, Schumacher requests all automotive battery chargers be classified as non-consumer products under the NOPA.

² 42 USC Section 6291, subd. (1). See also, Staff Report, page 2-3.

Ease of Compliance/Competitive Implications

The NOPA, page 9, indicates “The Energy Commission has determined based on the record that there are multiple technologies used in battery chargers currently being built and sold on the market, that cheaply and effectively reduce energy consumption.” The NOPA goes on to further state, “such technologies have not imposed, and will not impose, a large cost on either the manufacturer or consumer.” These statements are inaccurate and without basis when discussing technologies associated with automotive battery chargers.

One suggestion made in the NOPA, page 11, is that “replacing linear power supplies with switch mode power supplies and the charge regulating elements or some form of charger termination cost-effectively improve the 24-hour efficiency of small chargers by nearly 45 percent, while simultaneously reducing battery maintenance and no battery mode power.” It is completely inaccurate to state that technology is present and a simple switch from linear to high frequency/switch mode is feasible without major manufacturer changes with technology that is not readily available for automotive battery chargers, increasing costs to consumers, and creating a monopoly in the marketplace.

Lack of readily available technologies and increased costs to manufacturers:

It is inaccurate to state there is “readily available technology” to convert all automotive battery chargers from linear to switch mode as there are currently no automotive battery chargers utilizing over 150 amp engine start with switch mode technology in the marketplace today.

Further, even if there were readily available technologies, in normal channels of distribution, if a manufacturer must increase costs due to research and development, change in SKU's, and addition of new technologies that manufacturer must increase the cost to the retailer and the retailer will then increase the cost to the consumer and do so to maintain margins. For example, if the manufacturer raises costs \$1.00 then the retailer would increase costs \$2.00. Long and short, there will be increased costs to the manufacturer regardless of readily available technologies exist.

Increased costs to consumers:

A simple comparison of the current marketplace for automotive battery chargers reveals “replacing linear power supplies with switch mode power supplies” will impose a large cost to consumers. When you compare the automotive battery chargers on the market today switch mode battery chargers can cost the consumer up to 72% more per unit. See chart below evidencing price differentials between current linear and high frequency automotive battery charger units on the market today.

Seller	Linear Brand/ Model	High Frequency Brand/Model	Linear Unit Ratings	High Frequency Current Ratings	Hi Freq Price	Linear Price	Cost Difference
Walmart.com	Schumacher SE5212	Stanley 2/25/75	2/10/50	2/25/75	\$ 79.88	\$51.62	55%
Amazon	Schumacher SE1275	Stanley 2/25/75	2/12/75	2/25/75	\$ 79.88	\$64.88	23%
Amazon	Schumacher SE-1555	B & D VEC 1098	2/20/55/150	4/10/50/150	\$ 139.97	\$98.94	41%
Amazon	Schumacher XC-103	B & D VEC 1093	3/5/30/100	4/20/40/100	\$ 92.61	\$79.01	17%
Amazon	Schumacher SE-1510	B & D VEC 1093	2/15/100	4/20/40/100	\$ 92.61	\$75.00	23%
Amazon	Schumacher SE-1555	Stanley TGC-11	2/20/55/150	2/20/40/110	\$ 169.95	\$98.94	72%

Creating a monopoly in the automotive battery charger marketplace:

The State of California must be apprised that the regulation of automotive battery chargers efficiency standards will create a monopoly in the marketplace due to an existing patent. If standards require certain types of automotive battery chargers, specifically those with engine start, to utilize high frequency/switch mode technology, only one company will be able to manufacture such products.

Approximately \$58,000,000 (59%) of Schumacher's 2010 sales utilizes the engine start function. These units are manufactured with linear technology. In order to comply with the proposed regulations and testing set forth in the NOPA, Schumacher would be required to redesign these units to utilize high frequency/switch mode technology. Schumacher, along with every other automotive battery charger manufacturer, except for the owner of United States Patent Number 6,822,425 will no longer be allowed to manufacture battery chargers with engine start thereby increasing costs to consumers and creating a monopoly in the marketplace. Our company would be unable to sell this line of product and eliminate approximately \$58,000,000 in sales thereby eliminating U.S. jobs and our ability to compete in the marketplace. As such, our company requests all automotive battery chargers with the engine start feature be excluded from the CEC Efficiency Standards due to patent and cost implications.

Conversion of automotive battery chargers in compliance with the NOPA will not be a "cheap" and "effective" reduction of energy consumption as suggested. The State of California is required administratively to consider the benefits and business impacts of new rules like the CEC Efficiency Standards, which includes anti-competitiveness.³ While Schumacher is all for energy efficiency, The NOPA, as written, increases costs to consumers and creates a monopoly in the automotive battery charger marketplace eliminating our

³ See, Senate Bill 617 signed by Governor Jerry Brown.

company's competitiveness. It is our request that the State of California reconsider inclusion of automotive battery chargers as written in the NOPA.

Thank you in advance for your consideration of all points Schumacher has raised herein. Please do not hesitate to contact the undersigned or John Whiting, Schumacher's Vice President of Engineering, for further information or discussion of the points raised.

Sincerely,

A handwritten signature in black ink that reads "Shantel Bill". The signature is written in a cursive, flowing style.

Shantel D. Bill
Schumacher Electric Corporation